

CLAIMS

What is claimed is:

1. A method of estimating an outcome for a software development
5 project, comprising:
selecting a parametric rule having a plurality of variables;
choosing a project type, a lifecycle, and a standard for the software
development project;
assigning a type factor responsive to choosing the project type;
10 assigning a lifecycle factor responsive to choosing the lifecycle;
assigning a standard factor responsive to choosing the standard;
using the type factor, the lifecycle factor, and the standard factor as
variables in the parametric rule; and
generating the outcome.
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2. The method according to claim 1 wherein the outcome is a software
effort estimate for the software development project.
3. The method according to claim 1 wherein the outcome is a software
20 defect report for the software development project.
4. The method according to claim 1 wherein the outcome is a software
development schedule for the software development project.

5. The method according to claim 1 wherein the outcome is a
estimated cost for the software development project.

5 6. The method according to claim 1 wherein assigning the lifecycle
factor includes extracting the lifecycle factor from a look-up table.

7. The method according to claim 1 wherein assigning the standard
factor includes extracting the standard factor from a look-up table.

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8. The method according to claim 1 wherein using the lifecycle factor
includes using the lifecycle factor as a linear variable in the parametric rule.

9. The method according to claim 1 wherein using the standard factor
15 includes using the standard factor as a linear variable in the parametric rule.

10. The method according to claim 1 wherein using the lifecycle factor
includes using the an inverse of the lifecycle factor as a linear variable in the
parametric rule.

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11. The method according to claim 1 wherein using the standard factor includes using an inverse of the standard factor as a linear variable in the parametric rule.

5 12. The method according to claim 1 wherein the parametric rule further uses a size factor indicative of the number of lines of code to be written in the software development project.

10 13. The method according to claim 12 wherein the size factor is generated by using an internet point metric.

14. The method according to claim 12 wherein the size factor is generated by using Domino point metric.

15 15. The method according to claim 1 wherein the parametric rule further uses an environmental factor indicative of environmental conditions specific to the software development project.

20 16. The method according to claim 1 further including using a generic lifecycle template to generate a work product breakdown.

17. The method according to claim 16, wherein the chosen lifecycle is mapped to the generic lifecycle template.

18. The method according to claim 1 further including using a generic
5 standard template to generate a document requirement report.

19. The method according to claim 16, wherein the chosen standard is mapped to the generic standard template.

10 20. The method according to claim 1 wherein the parametric rule uses the type factor, the lifecycle factor, the standard factor, an environment factor, and a size element.

21. The method according to claim 20 wherein the parametric rule is
15 used to determine an effort, and has the general form of "*EFFORT = TYPE FACTOR * LIFECYCLE FACTOR * STANDARD FACTOR * ENVIRONMENT FACTOR * SIZE ELEMENT.*"

22. The method according to claim 21 wherein the parametric rule is in
20 the form of " $EFFORT = \sum Env(l) * M(a) * Life * Std * KSLOC^{M(b) + \sum Env(s)}$ ".

23. The method according to claim 21 further including using a defect parametric rule and a defect factor associated with the project type, the defect parametric rule having the form of "DEFECT = DEFECT FACTOR * EFFORT * (1/LIFECYCLE FACTOR) * (1/STANDARD FACTOR)".

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24. The method according to claim 21 further including using a schedule parametric rule and a schedule factor associated with the project type, the schedule parametric rule having the form of " $Schedule = T(a) * Effort^{T(b) + (\sum env(s) / 5)}$ ".

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